
RA 06-39

Young Faculty Award (YFA)

Proposer Information Pamphlet

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06-39 Young Faculty Award (YFA)

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Agency/Microsystems Technology Office
(DARPA/MTO)

COORDINATING POC:

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FAX: (703) 696-2206

SECTION I: RA 06-39 Proposer Information

This section provides further information on the Young Faculty Award, the submission, evaluation, and funding processes, proposal format, and other general information.

The Defense Advanced Research Projects Agency (DARPA) often selects its research efforts through the Research Announcement (RA) process. The RA will appear first on the Grants.gov website at <http://www.grants.gov/>. The following information is for those wishing to respond to the RA.

The Microsystems Technology Office (MTO) of the Defense Advanced Research Projects Agency (DARPA) is seeking to encourage new faculty members at institutions of higher education in participating in its programs. This RA offers a venue by which research ideas proposed by young faculty can be sponsored and promoted within the MTO. The Young Faculty Award (YFA) is expected to provide MTO with revolutionary research ideas that are critical to future technology developments.

This solicitation is for single-author grant proposals for concept development and validation in one, or combinations of, the following areas of interest to MTO: 1) electronics, 2) photonics, 3) micro-electro-mechanical systems, 4) architectures, and 5) algorithms. Proposed research should focus on innovations that enable revolutionary advances in physics, materials, and devices. Speculative and high-risk ideas are strongly encouraged. The proposal should clearly state the problem being addressed and the proposed solution. The initial research should focus on a clearly defined problem which can be answered in a 12 month effort. However, MTO expects that this effort will be a precursor and proof of concept to a larger problem that is sufficiently important and challenging to warrant a full scale DARPA program of 3-5 years. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice. This solicitation is limited to participation by young investigators as defined in the Proposer Eligibility section.

The DARPA/MTO YFA proposal process is structured in the following manner. The competition will be carried out in three rounds. In the first round, applicants will submit a three (3)-page abstract to be evaluated by MTO. In round two, the authors of approximately 50 selected abstracts will be invited to attend a DARPA/MTO workshop where they will be given the opportunity to share their ideas with MTO Program Managers. In the third round, applicants will be asked to submit a final ten (10)-page proposal outlining the program idea, technical challenges, research outline and brief justification of the funding level. If compelling research topics are submitted, MTO intends to fund up to ten (10) of these concept proposals at an average level of \$150,000. Upon final selection, the authors will be given the opportunity to discuss teaming, should it be required.

AREAS OF INTEREST

The mission of the Microsystems Technology Office (MTO) is to exploit breakthroughs in materials, devices, circuits, and algorithms to develop beyond-leading-edge components with revolutionary performance and functionality to enable new platform capability of interest to the Department of Defense. In support of this mission, MTO is pioneering research in five core technology areas: 1) electronics, 2) photonics, 3) micro-electro-mechanical systems, 4) architectures, and 5) algorithms. These areas are the foundation for developing integrated Microsystems with revolutionary capabilities, with low power consumption, and small form factors. Ideas leading to significant performance improvements in all of these core areas are of interest. In electronics, this might include faster transistors or transistors with significantly lower power consumption leading to new circuit capabilities. In photonics, lasers with improved wallplug efficiencies leading to higher powers or improved wavelength coverage are included. Research on MEMS with higher performance, lower form factor and power consumption, and improved reliability is of great interest. Often, the most revolutionary capabilities result from exploiting the interfaces of these areas and new materials. One area of current interest includes close integration of electronics and photonics enabling novel architectures. Many MEMS rely on sophisticated combinations of electronics and photonics. Emerging areas of energy generation, and bio and chemical sensing often combine concepts from a number of core areas. Finally, the development of adaptive Microsystems with embedded control, processing, and sensing is of high interest. These examples are listed only to illustrate the type of research interests and are not meant to be suggestive of the type of responses expected for the YFA. MTO is particularly interested in concepts beyond the current core areas that will result in future core technologies.

All of the ideas proposed under YFA are expected to further MTO's goal of developing important enabling technologies for the DoD. Proposed efforts should have the potential for a significant impact on current technology and have bearing on issues confronting our Defense and National Security. New technologies and approaches to these issues are particularly encouraged. Additional information on the programs and interests within MTO is available within the DARPA/MTO web site (<http://www.darpa.mil/mto>).

PROPOSER ELIGIBILITY

This RA solicits single author proposals for research and development in the areas of interest to MTO. The participation is limited to non-tenured Assistant Professors with tenure-track positions at U.S. institution of higher learning and a Ph.D. degree obtained in the year 1996 or later. US citizenship or permanent residency is highly preferred.

Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals. However, no portion of this announcement will be set aside for HBCU and MI participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.

DARPA/MTO YOUNG FACULTY AWARD WORKSHOP

DARPA will host a workshop in support of the YFA program on November 16-17, 2006 at a location in the vicinity of Arlington, Virginia. The purpose of this workshop is to provide information on the MTO in general, and the YFA program in detail, facilitate additional discussion on technical topics of interest to the proposers, address questions from YFA proposers, and provide a forum for proposers to present their capabilities.

Attendance at the Workshop will be by invitation only, based on a review of the proposal abstracts submitted to the YFA RA. Approximately 50 authors will be invited to attend. Should the facility allow, DARPA reserves the right to invite additional authors. Should an invited author be unable to attend, request may be made for an alternate to attend. Materials presented at the workshop, along with answers to selected questions asked during the workshop, will be posted on the DARPA website and will be accessible through <http://www.darpa.mil/mto/solicitations/>.

Workshop Registration Instructions:

Workshop registration information will be supplied along with the workshop invitation. There will be no registration fee for the YFA Workshop.

Citizenship and Permanent Resident Instructions for Workshop participants:

All US Citizens must submit a US Citizenship Verification form to attend this conference. Foreign nationals who are current permanent residents must complete and submit a DARPA Form 60 "Foreign National Visit Request." These documents will be available on the workshop registration website, and should be faxed to (703) 816-5444 (Attention: Andrea Monts) prior to the meeting.

Workshop Point of Contact: Andrea Monts, 703-807-2858, RA06-39@darpa.mil.

TEAMING ARRANGEMENTS

This solicitation is for single author proposals. Upon final selection, the authors will be given the opportunity to discuss teaming, should it be required. Should it be necessary to team, potential team members must also be University professors, with preference given to faculty fitting the proposer eligibility guidelines.

PROPOSER'S QUESTIONS

A "Proposer's Questions," website will be posted for RA 06-39 on the DARPA, Microsystems Technology Office solicitations page (<http://www.darpa.mil/mto/solicitations/>). If you would like to have a question answered and posted on this site, please send your question to the following address: RA06-39@darpa.mil.

SUBMISSION PROCESS

Proposers **must** submit a proposal abstract by 4:00 p.m., local time, **Tuesday, October 3, 2006**. Full proposals must be submitted by 4:00 p.m., local time, **Tuesday, December 5, 2006**. DARPA will acknowledge receipt of the submission and assign a control number that should be used in all further correspondence regarding the proposal abstract. Proposal abstracts and proposals may not be submitted by fax or e-mail; any so sent will be disregarded.

DARPA will attempt to review proposal abstracts and proposals within thirty (30) calendar days after the respective submission deadlines. DARPA will respond to proposal abstracts with a recommendation to submit, or not submit, a full proposal, along with an invitation to a DARPA/MTO workshop for the selected (approximately) 50 authors. This procedure is intended to minimize unnecessary effort in proposal preparation and review. Regardless of the recommendation, the decision to submit a full proposal is the responsibility of the proposer. Proposal abstracts or full proposals submitted after the due date stated in the respective submission guidelines will not be evaluated for this award. ***In addition, full proposals submitted by proposers that did not participate in the abstract phase will not be considered.***

Restrictive notices notwithstanding, abstracts and proposals may be handled, for administrative purposes only, by a support contractor. This support contractor is prohibited from competition in DARPA technical research and is bound by appropriate nondisclosure requirements.

EVALUATION CRITERIA/EVALUATION AND FUNDING PROCESSES

Abstracts and proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. Evaluation of abstracts and proposals will be accomplished through a technical review using the following criteria, listed in descending order of relative importance: (1) overall scientific and technical merit; (2) potential contribution and relevance to the DARPA mission; (3) cost reasonableness and realism. Proposers will be notified of selectability as soon as the proposal evaluation process is completed. The Government reserves the right to select for award all, some, or none of the proposals received and to make awards without discussions.

DARPA intends to award grants (each at an average level of \$150,000) to young university faculty proposing innovative research that can be expected to lead to revolutionary advances of the state-of-the-art. Awards made under this RA are subject to the provisions of the Federal Acquisition Regulation (FAR) Subpart 9.5, Organizational Conflict of Interest. All facts relevant to the existence or potential existence of organizational conflicts of interest, as that term is defined in the FAR 9.501, must be disclosed. The disclosure shall include a description of the action the offeror has taken, or proposes to take, to avoid, neutralize or mitigate such conflict.

Proposals selected for funding are required to comply with provisions of the Common Rule (32 CFR 219) on the protection of human subjects in research

(<http://www.dtic.mil/biosys/downloads/32cfr219.pdf>) and the Department of Defense Directive 3216.2 (<http://www.dtic.mil/whs/directives/corres/html2/d32162x.htm>). All proposals that involve the use of human subjects are required to include documentation of their ability to follow Federal guidelines for the protection of human subjects. This includes, but is not limited to, protocol approval mechanisms, approved Institutional Review Boards, and Federal Wide Assurances. These requirements are based on expected human use issues sometime during the entire length of the proposed effort. For proposals involving "greater than minimal risk" to human subjects within the first year of the project, performers must provide evidence of protocol submission to a federally approved Institutional Review Board (IRB) *at the time of final proposal submission to DARPA*.

PROPOSAL ABSTRACT FORMAT

Proposal abstracts should have a cover sheet providing the title, name of the proposer, and complete contact information. The cover sheet should be clearly marked "PROPOSAL ABSTRACT." The total length of the abstract (excluding the cover sheet) should not exceed three (3) pages. All pages shall be printable on 8-1/2 by 11 inch paper with type not smaller than 12 point. The page limitation for proposal abstracts includes all figures, tables, and charts. No formal transmittal letter is required.

Proposal abstracts should concisely summarize the following:

- The quantitative end-of-program performance goals and milestones associated. The milestones and performance goals should be listed in a single table.
- An explanation of how the above goals and milestones compare to current state-of-the-art.
- A description of the uniqueness of the proposed technical solution.

PROPOSAL FORMAT

Proposals should have a cover sheet providing the title, name of the proposer, and complete contact information. The cover sheet should be clearly marked "PROPOSAL." The total length of the proposal (excluding the cover sheet) should not exceed ten (10) pages. All pages shall be printable on 8-1/2 by 11 inch paper with type not smaller than 12 point. The page limitation for proposals includes all figures, tables, and charts. Proposals should be accompanied by a transmittal letter signed by an official who is authorized to commit the offeror.

Proposals should include a summary of the program idea and technical challenges, a statement of work, and justification of the funding level requested. They should provide detailed information on the following:

- The statement of work should include quantitative end-of-program performance goals and milestones associated. The milestones and performance goals should be explained and listed in a single table.
- An explanation of how the above goals and milestones compare to current state-of-the-art.
- A description of the uniqueness of the proposed technical solution.

- A brief justification and cost breakdown for the funding requirements.

SUBMISSION INFORMATION

As stated above, proposal abstracts must be submitted by 4:00 p.m., local time, **Tuesday, October 3, 2006** and full proposals must be submitted by 4:00 p.m., local time, **Tuesday, December 5, 2006**. All submissions should be in the English language.

Abstracts and proposals should be submitted electronically using one of the following two submission methods. Note that dual submissions are not required and a paper copy is not required.

1. Abstracts and proposals may be submitted to this RA via the Grants.gov web site, <http://www.grants.gov/>, by using the "Apply" function.
2. DARPA/MTO will also employ an electronic upload process, the Technical Financial Information Management System (T-FIMS) Proposal Submission System, for abstract and proposal submissions to this RA. Electronic abstracts and proposals should be in Microsoft Word format or PDF and submitted via a web site interface: Web Site: <https://www.tfims.darpa.mil/baa>.

Organizations intending to submit abstracts or proposals through T-FIMS must register at: <http://www.tfims.darpa.mil/baa>. One registration per abstract or proposal should be submitted. Organizations wishing to submit multiple abstracts or proposals should complete a single registration for each submission. The deadline for registration for the electronic submissions of abstracts is **Tuesday, September 26, 2006** at the Uniform Resource Locator (URL) listed above. The deadline for registration for the electronic submissions of proposals is **Tuesday, November 28, 2006** at the Uniform Resource Locator (URL) listed above. By registering, the Proposer has made no commitment to submit.

The T-FIMS Proposal Submission System can support the following file formats: Portable Document Format (pdf), Word Document (doc), Plain Text (txt), Comma-separated Values (csv), PowerPoint Presentation (ppt), Excel Worksheet (xls), and Excel Workspace (xlw). Proposal submissions made through the T-FIMS Proposal Submission System must be no larger than 50 megabytes per file.

All material submitted electronically must be UNCLASSIFIED. Please DO NOT attempt to submit a CLASSIFIED material proposal through an electronic upload process as this is PROHIBITED. Offerors that intend to include classified, or potentially classified, information or data as part of their proposals shall submit an UNCLASSIFIED PROPOSAL referring to a classified annex. The offeror should contact the Technical POC for this RA, or the Security POC cited below, for guidance on submitting the classified annex.

Proposals received by MTO but not submitted specifically to the RA may be considered under the RA.

INTELLECTUAL PROPERTY

Noncommercial and Commercial Items (Technical Data and Computer Software)

All proposers should appropriately identify any potential restrictions on the Government's use of any Intellectual Property contemplated under a potential grant award. This includes both Noncommercial Items and Commercial Items. The Government may use the information during the source selection evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. If no restrictions are intended, then the proposer shall state "NONE."

Patents

Please include documentation proving your ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a patent application has been filed) that will be utilized under your proposal for the DARPA program. If a patent application has been filed for an invention that your proposal utilizes, but the application has not yet been made publicly available and contains proprietary information, you may provide only the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and a summary of the patent title, together with either: 1) a representation that you own the invention, or 2) proof of possession of appropriate licensing rights in the invention.

Intellectual Property Representations

Please provide a good faith representation that you either own or possess appropriate licensing rights to all other intellectual property that will be utilized in support of the research being proposed.

GUIDANCE FOR CLASSIFIED INFORMATION AND DATA

The Government anticipates that proposals submitted under this RA will be unclassified. In the event that a proposer chooses to submit a classified abstract or proposal or submit any documentation that may be classified, the following information is applicable.

Security Classification guidance on DD Form 254 will not be provided at this time since DARPA is soliciting ideas only. After reviewing the incoming proposals, if a determination is made that the award instrument may result in access to classified information, a DD Form 254 will be issued and attached as part of the award. Proposers choosing to submit a classified proposal must first receive permission from the Original Classification Authority to use their information in applying to this RA. An applicable classification guide should be submitted to ensure that the proposal is protected appropriately.

Classified submissions shall be in accordance with the following guidance:

Collateral Classified Data: Use classification and marking guidance provided by previously issued security classification guides, the Information Security Regulation (DoD 5200.1-R), and the National Industrial Security Program Operating Manual (DoD 5220.22-M) when marking and transmitting information previously classified by another original classification authority. Classified information at the Confidential and Secret level may only be mailed via U.S. Postal Service (USPS) Registered Mail or U.S. Postal Service Express Mail (USPS only; not DHL, UPS or FedEx). All classified information will be enclosed in opaque inner and outer covers and double wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee. The inner envelope shall be addressed to:

Defense Advanced Research Projects Agency (DARPA)
ATTN: RA 06-39, DARPA/MTO, Dr. Henryk Temkin
3701 North Fairfax Drive, Suite 535
Arlington, VA 22203-1714

The outer envelope shall be sealed with no identification as to the classification of its contents and addressed to:

Defense Advanced Research Projects Agency (DARPA)
Security & Intelligence Directorate, Attn: CDR
3701 North Fairfax Drive, Suite 832
Arlington, VA 22203-1714

All Top Secret materials should be hand carried via an authorized, two-person courier team to the DARPA Classified Document Registry (CDR).

Special Access Program (SAP) Information: Contact the DARPA Program Security Support Center (PSSC) at 703-812-1962/1970 for further guidance and instructions prior to transmitting to DARPA. All Top Secret SAP, must be transmitted via approved methods for such material. Consult the DoD Overprint to the National Industrial Security Program Operating Manual for further guidance. It is strongly recommended that you coordinate the transmission of SAP material and information with the DARPA PSSC prior to transmission.

Sensitive Compartmented Information (SCI) Data: Contact the DARPA Special Security Contact Office (SSCO) at 703-812-1993/1994 for the correct SCI courier address and instructions. All SCI should be transmitted through your servicing Special Security Officer (SSO) / Special Security Contact Officer (SSCO). All SCI data must be transmitted through your servicing Special Security Officer (SSO) / Special Security Contact Officer (SSCO). All SCI data must be transmitted through SCI channels only (i.e., approved SCI Facility to SCI facility via secure fax).

Proprietary Data: All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. It is the proposer's responsibility to clearly define to the Government what is considered proprietary in nature.

Proposers must have existing and in-place prior to execution of an award, approved capabilities (personnel and facilities) to perform research and development at the classification level they propose.

AWARD ADMINISTRATION INFORMATION

(1) Central Contractor Registration. Selected proposers not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to any award under this RA. Information on CCR registration is available at <http://www.ccr.gov>.

(2) Representations and Certifications. In accordance with Federal Acquisition Regulation 4.1201, prospective proposers shall complete electronic annual representations and certifications at <http://orca.bpn.gov>.

EXPORT LICENSES

The following provision will be incorporated into any resultant grant:

Should this project develop beyond fundamental research (basic and applied research ordinarily published and shared broadly within the scientific community) with military or dual-use applications the following apply:

(1) The contractor shall comply with all U. S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.

(2) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation, where the foreign person will have access to export-controlled technical data or software.

(3) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(4) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

CONFIDENTIALITY

It is the policy of DARPA to treat all proposals as competitive information and to disclose their contents only for the purpose of evaluation. No proposals will be returned. The original of each proposal received will be retained at DARPA and all other copies of non-selected proposals destroyed. Documentation related to the source selection process will be marked SOURCE SELECTION INFORMATION – SEE FAR 2.101 AND 3.104.

PUBLIC RELEASE OR DISSEMINATION OF INFORMATION

The Government anticipates that the selected proposals will result in grant awards for Contracted Fundamental Research as defined in DoD Instruction 5230.27 dated October 6, 1987. As such, the following provision, or similar, will be incorporated into any resultant award instrument:

"Papers resulting from unclassified Contracted Fundamental Research are exempt from prepublication controls/review pursuant to DoD Instruction 5230.27 dated October 6, 1987."

SECTION II: RA 06-39 “Young Faculty Award”

Defense Advanced Research Projects Agency (DARPA), Contracts Management Office (CMO), 3701 North Fairfax Drive, Arlington, VA 22203-1714.

A – YOUNG FACULTY AWARD, SOL RA 06-39, ABSTRACT DUE DATE 100306, PROPOSAL DUE DATE 120506, POC HENRYK TEMKIN, DARPA/MTO, FAX (703) 696-2206

PROGRAM OBJECTIVES AND DESCRIPTION

The Defense Advanced Research Projects Agency (DARPA) is soliciting research from single-author grant proposals for research and development in the areas of interest to MTO. The participation is limited to non-tenured Assistant Professors with tenure-track positions at U.S. institutions of higher learning and a Ph.D. degree obtained in the year 1996 or later. US citizenship or permanent residency is highly preferred. The objective is to encourage new faculty members at institutions of higher education in participating within DARPA/MTO programs. The Young Faculty Award (YFA) is expected to provide MTO with revolutionary research ideas that are critical to future technology developments. DARPA intends to award grants to young university faculty proposing innovative research that can be expected to lead to revolutionary advances of the state-of-the-art. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

DARPA seeks innovative proposals in the following areas:

1. Electronics
2. Photonics
3. Micro-electro-mechanical systems
4. Architectures
5. Algorithms

Additional information on these technology areas is provided in the Areas of Interest section of the RA 06-39 Proposer Information Pamphlet referenced below.

PROGRAM SCOPE

The Young Faculty Award initial research should focus on a clearly defined problem which can be answered in a 12-18 month effort. However, MTO expects that this effort will be a precursor and proof of concept to a larger problem that is sufficiently important and challenging to warrant a full scale DARPA program of 3-5 years.

The DARPA/MTO YFA proposal process is structured in the following manner. The competition will be carried out in three rounds. In the first round, applicants will submit a three (3)-page abstract to be evaluated by MTO. In round two, the authors of approximately 50

selected abstracts will be invited to attend a DARPA/MTO workshop where they will be given the opportunity to share their ideas with MTO Program Managers. In the third round, applicants will be asked to submit a final ten (10)-page proposal outlining the program idea, technical challenges, research outline and brief justification of the funding level. MTO intends to fund approximately ten (10) of these concept proposals at an average level of \$150,000. Upon final selection, the authors will be given the opportunity to discuss teaming, should it be required. The technical POC for this effort is Henryk Temkin, fax: (703) 696-2206, electronic mail: RA 06-39@darpa.mil.

DARPA MTO YOUNG FACULTY AWARD WORKSHOP

DARPA will host a workshop in support of the YFA program on November 16-17, 2006 at a location in the vicinity of Arlington, Virginia. The purpose of this workshop is to provide information on the MTO in general, and the YFA program in detail, facilitate additional discussion on technical topics of interest to the proposers, address questions from YFA proposers, and provide a forum for proposers to present their capabilities.

Attendance at the workshop will be by invitation only, based on the proposal abstracts submitted to the YFA RA. Approximately 50 authors will be invited. Should the facility allow, DARPA reserves the right to invite additional authors. Should an invited author be unable to attend, request may be made for an alternate to attend. Materials presented at the workshop, along with answers to selected questions asked during the workshop, will be posted on the DARPA website and will be accessible through <http://www.darpa.mil/mto/solicitations/>.

Workshop Registration Instructions:

Workshop registration information will be supplied along with the workshop invitation. There will be no registration fee for the YFA Workshop.

Citizenship and Permanent Resident Instructions for Workshop participants:

All US Citizens must submit a US Citizenship Verification form to attend this conference. Foreign nationals who are current permanent residents must complete and submit a DARPA Form 60 "Foreign National Visit Request." These documents can be found on the workshop registration website, and should be faxed to (703) 816-5444 (Attention: Andrea Monts) prior to the meeting.

Workshop Point of Contact: Andrea Monts, 703-807-2858, RA06-39@darpa.mil

GENERAL INFORMATION

Proposers must obtain a pamphlet entitled "RA 06-39, Young Faculty Award, Proposer Information Pamphlet" which provides further information on the submission, evaluation, and funding processes, proposal abstract and proposal formats, and other general information. This pamphlet may be obtained from the FedGrants website: <http://www.grants.gov/>, World Wide Web (WWW) at URL <http://www.darpa.mil/> or by fax, electronic mail, or mail request

to the administrative contact address given below. Proposal abstracts and proposals not meeting the format described in the pamphlet may not be reviewed.

Proposal abstracts must be submitted to <https://www.tfims.darpa.mil/baa> or <http://www.grants.gov/> on or before **4:00 p.m., local time, Tuesday, October 3, 2006**. Proposal abstracts received after this time and date may not be reviewed. DARPA will respond to selected proposal abstracts with a recommendation to submit, or not submit, a full proposal, along with an invitation to a DARPA/MTO workshop for the selected (approximately) 50 authors. This procedure is intended to minimize unnecessary effort in proposal preparation and review. Regardless of the recommendation, the decision to submit a full proposal is the responsibility of the proposer. Proposal abstracts or full proposals submitted after the due date stated in the respective submission guidelines will not be evaluated for this award. ***In addition, full proposals submitted by proposers that did not participate in the abstract phase will not be considered.***

Proposals must be submitted to <https://www.tfims.darpa.mil/baa> or <http://www.grants.gov/> on or before 4:00 p.m., local time, **Tuesday, December 5, 2006**. Proposals received after this time and date may not be reviewed.

Restrictive notices notwithstanding, abstracts and proposals may be handled, for administrative purposes only, by a support contractor. This support contractor is prohibited from competition in DARPA technical research and is bound by appropriate nondisclosure requirements.

Awards made under this RA are subject to the provisions of the Federal Acquisition Regulation (FAR) Subpart 9.5, Organizational Conflict of Interest. All facts relevant to the existence or potential existence of organizational conflicts of interest, as that term is defined in the FAR 9.501, must be disclosed. The disclosure shall include a description of the action the offeror has taken, or proposes to take, to avoid, neutralize or mitigate such conflict.

Proposals selected for funding are required to comply with provisions of the Common Rule (32 CFR 219) on the protection of human subjects in research (<http://www.dtic.mil/biosys/downloads/32cfr219.pdf>) and the Department of Defense Directive 3216.2 (<http://www.dtic.mil/whs/directives/corres/html2/d32162x.htm>). All proposals that involve the use of human subjects are required to include documentation of their ability to follow Federal guidelines for the protection of human subjects. This includes, but is not limited to, protocol approval mechanisms, approved Institutional Review Boards, and Federal Wide Assurances. These requirements are based on expected human use issues sometime during the entire length of the proposed effort. For proposals involving “greater than minimal risk” to human subjects within the first year of the project, performers must provide evidence of protocol submission to a federally approved Institutional Review Board (IRB) *at the time of final proposal submission to DARPA*.

The Government reserves the right to select for award all, some, or none of the proposals received and to make awards without discussions. All responsible sources capable of satisfying

the Government's needs may submit an abstract proposal which shall be considered by DARPA. Input on technical aspects of the proposals may be solicited by DARPA from non-Government consultants /experts who are bound by appropriate non-disclosure requirements. Non-Government technical consultants/experts will not have access to abstract proposals that are labeled by their offerors as "Government Only".

Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs), are encouraged to submit abstract proposals and join others in submitting abstract proposals; however, no portion of this RA will be set aside for these organizations' participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.

All administrative correspondence and questions on this solicitation, including requests for information on how to submit an abstract and proposal to this RA, should be directed to one of the administrative addresses below; e-mail or fax is preferred. DARPA intends to use electronic mail and fax for correspondence regarding RA 06-39. Proposal abstracts may not be submitted by fax or e-mail; any so sent will be disregarded. DARPA encourages use of the WWW for retrieving the Proposer Information Pamphlet and any other related information that may subsequently be provided.

EVALUATION CRITERIA

Proposal abstracts and proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. Evaluation of proposal abstracts and proposals will be accomplished through a technical review using the following criteria, listed in descending order of relative importance: (1) overall scientific and technical merit; (2) potential contribution and relevance to the DARPA mission; (3) cost reasonableness and realism. Proposers will be notified of selectability as soon as the proposal evaluation process is completed. The Government reserves the right to select for award all, some, or none of the proposals received and to make awards without discussions.

The administrative addresses for this RA are:

Fax: (703) 696-2206 (Addressed to: DARPA/MTO, RA 06-39),

Electronic Mail: RA06-39@darpa.mil

Mail: DARPA/MTO, ATTN: RA 06-39
3701 North Fairfax Drive
Arlington, VA 22203-1714

This announcement and the Proposer Information Pamphlet may be retrieved via the WWW at URL <http://www.darpa.mil/> in the solicitations area.

SECTION III: Defense Advanced Research Projects Agency/Microsystems Technology Office (DARPA/MTO)

The Defense Advanced Research Projects Agency (DARPA) is a separately organized agency within the Department of Defense (DoD) under a Director, appointed by the Secretary of Defense. The Agency engages in advanced basic and applied research and development projects essential to the DoD, and conducts prototype projects that embody technology that may be incorporated into joint programs, programs in support of deployed U.S. forces, or selected military department programs.

The Microsystems Technology Office (MTO) focuses on the heterogeneous microchip-scale integration of electronics, photonics, and microelectromechanical systems (MEMS) to produce a broad array of interface systems; sensors, sources, actuators, and displays; signal processors; and packaging and interconnect systems.

High risk technology development continues in the microsystems area in order to solve the national level problems of protection from biological and information attack and to enable affordable precision target kill, operational dominance for mobile distributed command and control, combined manned/unmanned warfare, and dynamic, adaptive military planning and execution.

Biochemical warfare is a major theme for the DARPA programs. MTO is concentrating on developing the microsystems for sensing and processing biological and chemical threats.

Addition detail can be found on the MTO office home page accessible from the WWW via URL <http://www.darpa.mil/>.